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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,931	11/14/2003	Kenichi Nakata	103213-00062	7426

7590 07/20/2007
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EXAMINER

BEHM, HARRY RAYMOND

ART UNIT	PAPER NUMBER
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2838

MAIL DATE	DELIVERY MODE
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07/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/706,931	Applicant(s) NAKATA, KENICHI	
	Examiner Harry Behm	Art Unit 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 rejected under 35 U.S.C. 102(b) as being anticipated by (US 2002/0135345).

With respect to Claim 1, Terashi discloses a power supply device (Fig. 1) comprising: an output smoothing section (Fig. 1 51) receiving an input voltage (Fig. 1 Vi) and producing a smoothed voltage (Fig. 1 Vo);

a switching device (Fig. 1 Q1) connected to the output smoothing section;

an output current sensing section (Fig. 1 12) connected to the output smoothing section and monitoring an output current (Fig. 1 Io) that flows when the smoothed voltage (Fig. 1 Vo) is supplied to a load (Fig. 1 RL); and

a driver section (Fig. 1 21-26) for driving and controlling (Fig. 1 26) the switching device (Fig. 1 Q1) based on an output voltage (Fig. 1 V2) supplied through the output current sensing section (Fig. 1 12) to the load (Fig. 1 RL) and based on a result of monitoring (Fig. 1 22) by the output current sensing section.

With respect to Claim 2, Terashi discloses a power supply device as claimed in claim 1, wherein the driver section includes: an error amplifier (Fig. 1 A1) for amplifying a voltage difference between a first monitored voltage (Fig. 1 Vo resistor divided at node R1-R2) which varies according to the output voltage (Fig. 1 Vo) and a predetermined reference voltage (Fig. 1 Vref) so as to produce an error voltage (Fig. 1 V3); a comparator (Fig. 1 A2) for producing a comparison signal by comparing between a second monitored voltage (Fig. 1 V1+V2) which varies according to a driving current flowing through the switching element (Fig. 1 11 senses current through Q1) and the error voltage (Fig. 1 V3); a driving signal generating section for generating a driving signal (Fig. 1 Q) for driving the switching element in accordance with the comparison signal (Fig. 1 R); and an offsetting section (Fig. 1 31) for providing an offset (Fig. 1 V2) in accordance with a result monitored by the output current sensing section (Fig. 1 12) either for the second monitored voltage (Fig. 1 V1+V2) before the second monitored voltage is inputted to the comparator (Fig. 1 A2) or for the error voltage before the error voltage is inputted to the comparator.

With respect to Claim 3, Terashi discloses a power supply device as claimed in claim 2, wherein the driving signal generating section comprises a reset-priority-type RS latch (Fig. 1 26) circuit having a reset terminal (Fig. 1 R) for receiving the comparison signal, a set terminal (Fig. 1 S) for receiving a clock signal (Fig. 1 25), and an output terminal (Fig. 1 Q) for outputting the driving signal.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Terashi (US 2002/0135345) in view of Talbot (US 6,865,682).

With respect to Claim 4, Terashi discloses a power supply device as claimed in claim 2. Terashi does not disclose the structure of the current detector. Talbot teaches a power supply using a sense resistor as a current detector. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a sense resistor as a current detector. The reason for doing so is it is well known to convert a sensed current to a voltage using a sense resistor.

With respect to Claim 5, Terashi in view of Talbot discloses the power supply device as claimed in claim 4, wherein the offsetting section includes an amplifier (Fig. 1 22) for amplifying a voltage across the sensing resistor (Fig. 1 12) and a variable DC voltage source (Fig. 1 22) for providing an offset voltage (Fig. 1 V2) in accordance with an output voltage (Fig. 1 V2) of the amplifier (Fig. 1 22) for either the second monitored voltage (Fig. 1 V2) or the error voltage.

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



KARL EASTHOM
SUPERVISORY PATENT EXAMINER